



MATERIAL SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

MANUFACTURED FOR:
DAP INC.
2400 Boston Street
Baltimore MD 21224

24 HOUR EMERGENCY:
TRANSPORTATION: 1-800-535-5053
MEDICAL : 1-800-327-3874

PREPARE DATE : 10/11/2002 GENERAL INFORMATION:
REVISION NO. : 0 DAP INC. : 1-888-DAP-TIPS (1-888-327-8477)
REVISION DATE: 10/11/2002

DAP MSDS No.: 00008680
DAP UPC NUMBER: 7079808680

Product name: DAP 8680 Titanium Silicone Sealant White
Generic Description: Silicone Sealant
Physical Form: Paste
Color: White
Odor: Alcoholic odor

NFPA Profile: Health 1 Flammability 1 Instability/Reactivity 0

Note: NFPA = National Fire Protection Association

SECTION 2 - OSHA HAZARDOUS COMPONENTS

CAS Number	Wt %	Component Name
PMN871176	40.0-70.0	Dimethyl siloxane, trimethoxysilyl-termi
1185-55-3	1.0-5.0	Methyltriacetoxysilane
3087-39-6	<=2.0	t-butyl titanate
18395-30-7	1.0-5.0	Isobutyl trimethoxysilane

The above components are hazardous as defined in 29 CFR 1910.1200

SECTION 3 - EFFECTS OF OVEREXPOSURE

Acute Effects

Eye: Direct contact may cause moderate irritation.

Skin: No significant irritation expected from a single short-term exposure.

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SECTION 3 - EFFECTS OF OVEREXPOSURE

Inhalation: No significant effects expected from a single short-term exposure. Vapor overexposure may cause drowsiness.

Oral: Low ingestion hazard in normal use.

Prolonged/Repeated Exposure Effects

Skin: Repeated or prolonged exposure may cause irritation.

Inhalation: No known applicable information.

Oral: Repeated ingestion or swallowing large amounts may injure internally.

Signs and Symptoms of Overexposure

No known applicable information.

Medical Condition Aggravated by Exposure

No known applicable information.

The above listed potential effects of overexposure are based on actual data, results of studies performed upon similar compositions, component data and/or expert review of the product. Please refer to Section 11 for the detailed toxicology information.

SECTION 4 - FIRST AID MEASURES

Eye: Immediately flush with water for 15 minutes. Get medical attention.

Skin: No first aid should be needed.

Inhalation: Remove to fresh air. Get medical attention if ill effects persist.

Oral: Get medical attention.

Comments: Treat according to person's condition and specifics of exposure.

SECTION 5 - FIRE FIGHTING MEASURES

Flash Point: Not applicable.

Autoignition Temperature: Not determined.

Flammability Limits in Air: Not determined.

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SECTION 5 - FIRE FIGHTING MEASURES

Extinguishing Media: On large fires use dry chemical, foam or water spray. On fires use carbon dioxide (CO₂), dry chemical or water spray. Water can be used to cool fire exposed containers.

Fire Fighting Measures: Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire-exposed containers cool.

Unusual Fire Hazards: None.

Hazardous Decomposition Products

Thermal breakdown of this product during fire of very high heat conditions may evolve the following hazardous decomposition products: Silicon dioxide. Metal oxides. Carbon oxides and traces of incompletely burned carbon compounds. Formaldehyde. Nitrogen oxides.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Containment/Clean up: Observe all personal protection equipment recommendations described in Sections 5 and 8. Wipe up or scrape up and contain for salvage or disposal. Clean area as appropriate since some silicone materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbent or cleaning materials appropriately, since spontaneous heating may occur. Local, state, and federal laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which federal, state and local laws and regulations are applicable. Sections 13 and 15 of this MSDS provide information regarding certain federal and state requirements.

Note: See section 8 for Personal Protective Equipment for Spills. Call (989) 496-5900, if additional information is required.

SECTION 7 - HANDLING AND STORAGE

Use with adequate ventilation. Product evolves flammable methyl alcohol when exposed to water or humid air. Provide ventilation during use to control exposure within Section 8 guidelines or use air-supplied or self contained apparatus. Product evolves t-butyl alcohol when exposed to water or humid air. Provide ventilation during use to control exposure guidelines or use air-supplied or self contained breathing apparatus. Avoid eye contact. Avoid breathing vapor. Keep container closed. Do not take internally.

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SECTION 7 - HANDLING AND STORAGE

Use reasonable care and store away from oxidizing materials. Keep container closed and store away from water or moisture.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Component Exposure Limits

CAS Number	Component Name	Exposure Limits
1185-55-3	Methytrimethoxysilane	Dow corning guide: TWA 50 ppm. Also see methy alcohol comments.
3087-39-6	t-Butyl titanate	See t-butyl alcohol comment
18395-30-7	Isobuthyl trimethoxysilane	See methyl alcohol comments

T-butyl alcohol forms on contact with water or humid air. Provide adequate ventilation to control exposures within guidelines of OSHA PEL(final rule): TWA 100 ppm, 300 mg/m³ and ACGIH TLV: TWA 100 ppm. Methyl alcohol forms on contact with water of humid air. Provide adequate ventilation to control exposures within guidelines of OSHA PEL: TWA 200 ppm and ACIGIH TLV-skin: TWA 200 ppm, STEL 250 ppm.

Engineering Controls

Local Ventilation: Recommended.

General Ventilation: Recommended.

Personal Protective Equipment for Routine Handling

Eyes: Use proper protection - safety glasses as a minimum.

Skin: Wash at mealtime and end of shift is adequate.

Suitable Gloves: No special protection needed.

Inhalation: Use respiratory protection unless adequate local exhaust ventilation is provided or air sampling data show exposures are within recommended exposure guidelines. Industrial Hygiene Personnel can assist in judging the adequacy of existing engineering controls.

Suitable Respirator: General and local exhaust ventilation is recommended limits. Where concentrations are above recommended limits as determined by air sampling or are unknown, appropriate respiratory protection should be worn. Follow OSHA Respirator Regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators.

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SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal Protective Equipment for Spills

Eyes: Use full-face respirator.

Skin: Washing at mealtime and end of shift is adequate.

Inhalation/Suitable Respirator: Respiratory protection recommended. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MHSA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is potential for uncontrolled release., exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

Precautionary Measures: Avoid eye contact. Avoid breathing vapor. Keep container closed. Do not take internally. Use reasonable care.

Comments: Product evolves flammable methyl alcohol when exposed to water or humid air. Provide ventilation during use to control exposure within Section 8 guidelines or use air-supplied or self-contained breathing apparatus. Product evolves t-butyl alcohol when exposed to water or humid air. Provide ventilation during use to control exposure guidelines or use air-supplied or self-controlled breathing apparatus.

Note: These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Paste
Color: White
Odor: Alcoholic odor
Specific Gravity @ 25oC: 1.03
Viscosity: Not Determined.
Freezing/Melting Point: Not Determined.
Boiling Point: Not Determined.
Vapor Pressure @ 25oC: Not Determined.
Vapor Density: Not Determined.
Solubility in Water: Not Determined.
pH: Not Determined.
Volatile content: Not Determined.

Note: The above information is not intended for use in preparing product specifications.

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability: Stable.

Hazardous Polymerization: Hazardous polymerization will not occur.

Conditions to Avoid: None.

Materials to Avoid: Oxidizing material can cause a reaction. Water, moisture, or humid air can cause hazardous vapors to form as described in Section 8.

SECTION 11 - TOXICOLOGICAL INFORMATION

No known applicable information.

SECTION 12 - ECOLOGICAL INFORMATION

Environmental Fate and Distribution

Complete information is not yet available.

Environmental Effects

Complete information is not yet available.

Fate and Effects in Waste Water Treatment Plants

Complete information is not yet available.

Ecotoxicity Classification Criteria

Hazard Parameters (LC50 or EC50)	High	Medium	Low
Acute Aquatic Toxicity (mg/L	<=1	>1 and <=100	>100
Acute Terrestrial Toxicity High	<=100	>100 and <=2000	>2000

This table is adapted from Environmental Toxicology and Risk Assessment, ASTM STP 1179, p.34 1993.

This table can be used to classify the ecotoxicity of this product when ecotoxicity data is listed above. Please read the other information presented in the section concerning the overall ecological safety of this material.

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SECTION 12 - ECOLOGICAL INFORMATION

SECTION 13 - DISPOSAL CONSIDERATIONS

RCRA Hazard Class (40 CFR 261)

When a decision is made to discard this material, as received, is it classified as a hazardous waste? No State or local laws may impose additional regulatory requirements regarding disposal. Call (989) 496-6315, if additional information is required.

SECTION 14 - TRANSPORT INFORMATION

DOT Road Shipment Information (49 CFR 172.101)

Not subject to DOT.

Ocean Shipment (IMDG)

Not subject to IMDG code.

Air Shipment (IATA)

Not subject to IATA regulations.

SECTION 15 - REGULATORY INFORMATION

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

TCSA Status: All chemicals substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

EPA SARA Title III Chemical Listings

Section 302 Extremely Hazardous Substances:
None.

Section 304 CERCLA Hazardous Substances:
None.

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SECTION 15 - REGULATORY INFORMATION

Section 312 Hazard Class:

Acute: Yes
Chronic: No
Fire: No
Pressure: No
Reactive: No

Section 313 Toxic Chemicals:

None present or none present in regulated quantities.

Supplemental State Compliance Information

California

Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm.

None Known.

Massachusetts

No ingredient regulated by MA Right-to-Know Law present.

New Jersey

CAS Number	Wt%	Component Name
PMN871176	40.0-70.0	Dimethyl siloxane, trimethoxysilyl-terminated
63148-62-9	15.0-40.0	Polydimethylsiloxane
112945-52-5	7.0-13.0	Amorphous fumed silica
68083-19-2	7.0-13.0	Dimethyl siloxane, dimethylvinyl-terminated
18395-30-7	1.0-5.0	Isobutyl trimethoxysilane
3087-39-6	<=2.0	t-Butyl titanate
1185-55-3	1.0-5.0	Methytrimethoxysilane

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SECTION 15 - REGULATORY INFORMATION

Pennsylvania

CAS Number	Wt%	Component Name
PMN871176	40.0-70.0	Dimethyl siloxane, trimethoxysilyl-terminated
63148-62-9	15.0-40.0	Polydimethylsiloxane
68083-19-2	7.0-13.0	Dimethyl siloxane, dimethylvinyl-terminated
112945-52-5	7.0-13.0	Amorphous fumed silica

SECTION 16 - OTHER INFORMATION

Prepared by: Dow Corning Corporation

These data are offered in good faith as typical values and not as a product specification. No warranty either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review the recommendations in specific context of the intended use and determine if they are appropriate.

< End OF MSDS >